



The 31th ISFN Annual Meeting

12-14 January, 2025

Dan Hotel | Queen Of Sheba Hotel, Eilat



KALEIDOSCOPE
Conferences | Events | Exhibitions

Sunday, January 12th 2025

11:00-13:00 Welcome, Check in

13:00-14:00 Lunch

14:00-15:15 Opening, Plenary Lecture 1

15:30-17:30

A1

Boaz Barak

Myelin and oligodendrocytes dysfunction in neuropathology

Session Speakers -
Inbar Fischer, Tal Iram, Elior Peles, Michal Ben-Shachar, Boaz Barak

Inbar Fischer
White matter abnormalities in a mouse model for autism with a human-based mutation in shank3 gene

A2

Chaya Kalcheim

Sensory systems: from development to function

Session Speakers -
Chaya Kalcheim, Adi Salzberg, Alex Binshtok, Ilan Lampl, Galit Shohat-Ophir

Chaya Kalcheim
Regulation of dynamic cell fate transitions during spinal cord development

A3

Illana Gozes, Haitham Amal

Psychiatric disorders: from molecular mechanisms to drug targets

Session Speakers -
Hermona Soreq, Illana Gozes, Hanokh Khaphzan, Shashank Ojha

Hermona Soreq
Which processes control novel cholinergic-targeting micrnas integrated into the primate genome?

A4

Rita Schmidt, Edna Furman-Haran

Functional differences between individuals - what can we learn from long and short term signal variations in the human brain

Session Speakers -
Aviv Mezer, Hadar Kolb, Tal Geffen, Rita Schmidt, Ido Tavor, Gerry Leisman, Daniel Reznik

Aviv Mezer
Substantia nigra and putamen asymmetries explain motor dysfunction in Parkinson's disease

A5

Ofer Yizhar

Beyond "adult male mice": circuits and behavior throughout the lifespan

Session Speakers -
Dana Rubi Levy, Maithe Arruda-Carvalho, Daniel Zelmanoff, Shay Stern, Ofer Yizhar, Anat Kahan

Dana Rubi Levy
Tracing life's arc through behavior

A6

Arseny Finkelstein, Alon Rubin

Using large cellular populations to reveal the neuronal code

Session Speakers -
Jan Grudermann, Yael Bitterman, Noga Mudrik, Lilach Avitan, Alon Rubin, Arseny Finkelstein, Odeya Marmor

Jan Grudermann
Ensemble state changes in sensory thalamus represent learned outcomes

15:30–17:30

A1

Tal Iram

Young CSF restores oligodendrogenesis and memory in aged mice via Fgf17

Elior Peles

Differential subcellular distribution of SynCAM/Cadm proteins in neurons guides myelin targeting

Michal Ben-Shachar

Long-range connections in the human brain and their contribution to cognition

A2

Adi Salzberg

Mechanical forces in proprioceptor development and function

Alex Binshtok

Molecular and structural plasticity of nociceptive peripheral terminals underlying pathological pain

Ilan Lampl

Isolated correlates of somatosensory perception in the mouse cortex

Galit Shohat-Ophir

A highly conserved A-to-I RNA editing event within the glutamate-gated chloride channel GluCl α is necessary for olfactory-based behaviors in *Drosophila*

A3

Illana Gozes

Adnp/nap (davunetide) protection in brain diseases is sex-dependent

Hanokh Khaphzan

The role of mitochondrial dysfunction in the early brain development of angelman syndrome

Shashank Ojha

A Crosstalk between nitric oxide and mTOR signaling pathway in autism spectrum disorder (ASD)

A4

Hadar Kolb

What can we learn from long and short-term signal variations in magnetic resonance imaging of patient

Tal Geffen

Functional connectivity gradients and thought-patterns in schizophrenia

Rita Schmidt

Increasing sensitivity in fMRI to study individual differences – advantages of high field human MRI

Ido Tavor

Relating Activity and Connectivity in the Learning Brain

Gerry Leisman

Living the inverted “U”: Connecting the ups and downs from fetus to grave in movement and cognition

Daniel Reznik

Dissociating Distinct Cortical Networks Associated with Subregions of the Human Medial Temporal Lobe

A5

Maithe Arruda-Carvalho

Maturation of Prefrontal Cortex Pathways Modulating Emotional Learning and Stress Sensitivity

Daniel Zelmanoff

Oxytocin signaling regulates maternally directed behavior during early life

Shay Stern

The dynamic structure of behavioral individuality across developmental timescales

Anat Kahan

The afternoon role of the circadian VIP neurons in regulating the mammalian estrous cycle

A6

Yael Bitterman

The distributed code of goal directed behavior

Noga Mudrik

Decomposed linear dynamical systems (lds) for studying neural dynamics within & between brain areas

Lilach Avitan

Cracking the social code using whole-brain recording of the larval zebrafish

Alon Rubin

Internal structure of neuronal codes for space in hippocampus and cortex

Arseny Finkelstein

Multi-regional and local mechanisms of cortical communication during goal-directed behavior

Odeya Marmor

Brain wide network within and between naturally socializing mice

17:30–18:00 *Coffee Brake*

18:00–19:00 **Plenary Lecture 2**

19:00-20:30 Dinner

20:30-22:30 Beer and **Poster Session A** - All presenters stand by their posters

Monday, January 13th, 2025

08:30-10:3

B1

Tal Laviv

Molecular mechanisms of synaptic plasticity in the developing and adult brain

Session Speakers -
Alberto Cruz-Martin ,
Satoshi Kida, Shira Knafo,
Ivo Spiegel, Sharbel Eid,
Leore Heim, Maya Shelly

Alberto Cruz-Martin

A non-canonical mechanism of complement 4-driven cortical synaptic loss

Satoshi Kida

Roles of the hippocampus in fear memory reconsolidation and extinction

Shira Knafo

Exploring the Interplay of Hippocampal TACR3 and Systemic Testosterone in the Regulation of Anxiety

Ivo Spiegel

The genomic basis of behavioral state-dependent modulation of sensory processing and neural circuit

Sharbel Eid

Deciphering the role of cell-specific MeCP2 dynamics in neuronal function and dysfunction

B2

Itamar Kahn

Circuit mechanisms of motor learning and control in animals and humans

Session Speakers -
Hadas Benisty, Roy Mukamel,
Raffaella Tonini, Ariel Tankus

Hadas Benisty

M1 reorganization of layer 2-3 network dynamics underlying motor learning

Roy Mukamel

Linking actions to their sensory consequences in the human brain

Raffaella Tonini

Subregion specificity of serotonin signal at dorsal striatal circuits shapes behavioral switching in response to reward

Ariel Tankus

Speech features neural encoding in the thalamus of parkinson's disease and essential tremor patients

B3

Benedetta Heimler

Cognitive-motor-affective interactions during naturalistic behaviors in virtual reality

Session Speakers -
Michal Ramot, Rony Hirschhorn, Ramit Ravona,
Prof. Plotnik, Benedetta Heimler

Michal Ramot

Harnessing the full power of naturalistic paradigms for the study of human behavior

Rony Hirschhorn

Exploring Unconscious Processing with Immersive Virtual Reality

Ramit Ravona

A new biomarker for apathy and depression in cognitive impairment based on physiological reactivity

Meir Plotnik

More than meets the eyes - gait modulations due to gravity

Benedetta Heimler

Evaluating cognitive-motor interactions in Parkinson's disease using a novel VR-based assessment

B4

Oded Rechavi

"Cogito, ergo sum" - how perception shapes our physiology

Session Speakers -
Shamgar Ben-Eliyahu, Noam Sobel, Lior Rozenkrants,
Lior Laufer

Shamgar Ben-Eliyahu

Noam Sobel

Liron Rozenkrantz

How beliefs shape reality: from information processing to physical health

Lior Laufer

Organization of temporal patterns of behavior across a full developmental trajectory

B5

Abigail Livny-Ezer

The use of Artificial Intelligence (AI) in medical neuroimaging, will it change practice?

Session Speakers -
Abigail Livny-Ezer, Dr. Yaara Erez, Firas Mawase,
Maya Kadushin, Tzipi Horowitz-kraus, Sarah Stern

Abigail Livny-Ezer

Diagnosis, outcome prediction and precision medicine in brain disorders using connectomics and ai

Yaara Erez

Augmenting multi-modality neuroimaging in patients with brain tumors using ECOG, fMRI and AI

Firas Mawase

Leveraging Artificial Intelligence for Advanced Neural Prosthetics: Enhanced Detection of Dexterous

Maya Kadushin

(from Ido Tavor's lab)
Predicting cognitive abilities from brain connectivity using artificial intelligence

Tzipi Horowitz-kraus

Does AI provide new information or validate existing findings? Current and future directions in dyslexia

B6

Dan Frenkel

Impairment in metabolic pathways in neurodegenerative disease

Session Speakers -
Francisco J.Quintana, Jens Pahnke, Ronit Pinkas-Kramarski, Dan Frenkel,
Hagit Eldgar Finkelman,
Sapir Golan Shekhtman

Francisco J.Quintana

Regulation of the immune response in the CNS by astrocytes

Jens Pahnke

Abca transporters modulate essential metabolic pathways and protect against neurodegeneration

Ronit Pinkas-Kramarski

Impaired autophagy in apoE expressing cells.

Dan Frenkel

The link between metabolic changes in gila cells to the development of neurodegenerative diseases

Hagit Eldgar Finkelman

Inhibition of gsk-3 alpha as a protective strategy against neurotoxicity and oxidative stress

08:30–10:3

B1

Leore Heim

Channeling Mitochondrial Calcium for Homeostatic Regulation of Hippocampal Activity

Maya Shelly

The role of non-vesicular lipid transport at ER-PM contact sites in phosphoinositide signaling in dendrite development in early circuit establishment

B2

B3

B4

B5

B6

Sapir Golan Shekhtman

Regional Fat is Related to Lower Cognitive Functioning and Brain Volumes in High AD-Risk Males

10:30–11:00

Coffee Brake

10:45–13:45 Eilat student's panel at queen of Sheba hotel

11:00–13:00

C1

C2

C3

C4

C5

C6

Tawfeeq Shekh-Ahmad

Recent Advances in Gene Therapy for Neurological Disorders

Session Speakers -
Tawfeeq Shekh-Ahmad, Moran Rubinstein, Rami Aqeilan, Daniel J. Steinberg

Tawfeeq Shekh-Ahmad
CNS-targeted Antioxidant Gene Therapy for Treating Epilepsy

Moran Rubinstein
Dravet syndrome mouse models for novel gene therapy development

Rami Aqeilan
Neuron-Specific AAV-Mediated WWOX Gene Therapy Rescues Mortality and Seizure Phenotypes in WOREE Syndrome Models

Dmitri Rusakov

Astroglial regulation of synaptic circuits

Session Speakers -
Christian Henneberger, Nathalie Rouach, David Holcman, Dmitri Rusakov

Christian Henneberger
Multimodal and multicellular control of NMDA receptors

Nathalie Rouach
Astroglial regulation of maternal behavior

David Holcman
Reconstructing glial functional networks from calcium times series

Tal Burstyn-Cohen

Cellular interactions guiding neural development and function developing nervous system

Session Speakers -
David Shprinzak, Orit Shefi, Gil Levkowitz, Roberta Fresia, Dalit Sela-Donenfeld,

Shahar Kasirer
Mechanics of hair cell regeneration in the inner ear

Orit Shefi
Neuronal interactions with nano-based platforms for directing neuronal growth engineering

Gil Levkowitz
Neural plate progenitors give rise to both anterior and posterior pituitary cells

Bruce Hope

Molecular, cellular, and circuit mechanisms of drug-related learning

Session Speakers -
Itay Shalom, Bruce Hope, Rami Yaka, Segev Barak, Yoni Kupchik

Itay Shalom
Probing the circuit underlying cocaine-induced stereotypies with a novel behavior analysis platform

Bruce Hope
Cell types and unique transcriptomic alterations of neuronal ensembles activated by cocaine-induced

Rami Yaka
Role of the translational machinery in cocaine-induced behaviours

Gali Umschweif

cellular and molecular regulation of stress-induced behavior

Session Speakers -
Gali Umschweif-Nevo, Gal Richtel-Levin, Dorit Farfara-Cohen, Alon Chen, Sarah Stern, Alaa saleh

Gali Umschweif-Nevo
Neurensin-2: a novel cell-type-specific stress-responsive protein

Gal Richtel-Levin
The dorsal dentate gyrus - a surprising player in stress vulnerability and resilience

Dorit Farfara-Cohen
Serotonin regulates immune cell infiltration to the brain compartment via the pineal gland

Eilat Students session

11:00–13:00	C1	C2	C3	C4	C5	C6
	<p>Daniel J. Steinberg Epilepsy in a dish: Using brain organoids for studying WWOX-related neurological disorders and gene therapy</p>	<p>Dmitri Rusakov Monitoring synaptic fidelity and perisynaptic environment in the intact brain</p>	<p>Roberta Fresia Protein s (pros1) regulates microglial development and function</p> <p>Dalit Sela-Donenfeld Hindbrain boundaries–niches of neural progenitor/ stem cells regulated by their extracellular matrix</p>	<p>Segev Barak Long-term alcohol consumption enhances accumbal myelination and impairs neural connectivity</p> <p>Yoni Kupchik Synaptic plasticity alterations in ventral pallidal circuitry after abstinence from cocaine</p>	<p>Alon Chen Sarah Stern</p> <p>Alaa saleh Biophysical mechanism underlying epigenetically inherited stressful behavior</p>	
13:00–14:00	Lunch					
14:00–15:00	Plenary Lecture 3					
15:30–17:30	D1	D2	D3	D4	D5	D6
	<p>Yuval Nir</p> <p>Sleep: unconscious restoration, from molecules to behavior</p> <p>Session Speakers – Gali Krayden, Refaela Atsmon, Hagai Bergman, Yuval Nir, Anat Arzi</p> <p>Gali Krayden Sleep and repair of DNA breaks across evolution</p> <p>Refaela Atsmon Homeostatic regulation of CA1 firing rate set points and contextual memory retrieval in mice</p> <p>Hagai Bergman Sleep and sedation in basal ganglia in health and Parkinson’s disease</p>	<p>Haim Sompolinsky</p> <p>Neuroscience of Knowledge</p> <p>Session Speakers – Haim Sompolinsky, Edmond and Lily Safra, Davide Zoccolan, Rodrigo Quian Quiroga, Winrich Freiwald, Mathew Diamond</p> <p>Haim Sompolinsky, Edmond and Lily Safra Geometry of Neural Representations: From Vision to Language</p> <p>Davide Zoccolan Seeing what you hear: how sound power modulates rat visual perception</p> <p>Rodrigo Quian Quiroga A unique coding of memories in the human hippocampus</p>	<p>Ramon Birnbaum</p> <p>Neuronal transcription regulation</p> <p>Session Speakers – Eran Mehsorer, Evan Eliot, Dan Bracha, Rawan Alatawna, Igor Ulitsky, Ramon Birnbaum</p> <p>Eran Mehsorer Mutant Huntingtin enhances neuronal differentiation and disrupts global DNA methylation in human iPSC-derived cerebral organoids</p> <p>Evan Eliot Forebrain neuronal Smc3 regulates appetite, weight, and metabolic health</p> <p>Dan Bracha Probing and Reprogramming Transcriptionally Active Liquid Bodies in Living Cells</p>	<p>Pablo Blinder</p> <p>New insights into Brain Barriers development and function</p> <p>Session Speakers – Karina Yaniv, Ayal Ben-Zvi, Tali Ilowitz, Preethi Rajamannar, Nir Cafri, Meshi Zorsky</p> <p>Karina Yaniv Mechanisms underlying the establishment and functionality of the Neurovascular Unit</p> <p>Ayal Ben-Zvi Unique features of the arterial Blood–Brain Barrier</p> <p>Tali Ilowitz Nanobubble-mediated BBB opening as a platform for enhanced delivery to brain capillaries</p>	<p>Omer Revah</p> <p>Human brain organoids in neurodevelopment and disease</p> <p>Session Speakers – Orly Reiner, Abed Mansour, Omer Revah, Miri Danan, Gotthold, Gal Lazarus</p> <p>Orly Reiner MorphoNeuroChip: Unveiling Brain Malformations’ Secrets at the Molecular Level</p> <p>Abed Mansour A novel neuroimmune human brain organoid model to study microglia in health and disease</p> <p>Omer Revah Using stem cells to build a model of the human cortex in vivo</p>	<p>Orit Shefi</p> <p>Neuromechanics and Neuroengineering</p> <p>Session Speakers – Vittoria Raffa, Yossi Yovel, Matan Mussel, Adir Yarmus</p> <p>Vittoria Raffa Axon growth in response to pico-newton mechanical force: from molecular mechanisms to applications</p> <p>Yossi Yovel Using AI to model animal navigation</p> <p>Matan Mussel On spikes and sound in lipid membranes</p>

15:30–17:30	D1	D2	D3	D4	D5	D6
	<p>Yuval Nir Sleep and memory consolidation in health and disease</p> <p>Anat Arzi Unconsciousness Dynamics: From Sleep to Disorders of Consciousness</p>	<p>Winrich Freiwald Neuroscience of Knowledge: from Face Perception to Person</p> <p>Mathew Diamond Neuronal mechanisms underlying a single (not just the average) decision</p>	<p>Rawan Alatawna Transcription factors and their corresponding regulatory elements during neuronal differentiation</p> <p>Igor Ulitsky Regulation of neuronal chromatin environments by long noncoding RNAs</p> <p>Ramon Birnbaum Deciphering gene regulatory elements during inhibitory interneuron differentiation using deep neural</p>	<p>Preethi Rajamannar Oxytocin may regulate its own uptake via blood flow dynamics</p> <p>Nir Cafri Blood Brain Barrier Dysfunction in Drug Resistance Epilepsy: A Multi-Center Feasibility Study</p> <p>Meshi Zorsky Exosomes from neural cells enhance barrier functions in iPSC-based model of the human BBB</p>	<p>Miri Danan Gotthold Early neurodevelopment at the single-cell resolution</p> <p>Gal Lazarus Collaborating with Patient Advocacy Groups to Facilitate Drug Development for NDD</p>	<p>Adir Yarmus Mechanical Dynamics of Neurons Probed With Atomic Force Microscopy</p>
17:30–18:00	Coffee break					
18:00–19:00	Plenary Lecture 4					
19:00–19:30	ISFN General Assembly Business Meeting – Regular and emeritus members only – better half an hour than zoom meeting					
19:00–20:30	Dinner					
20:30–22:30	beers and Poster Session B					
22:30–24:30	DJ party					

Tuesday, January 14th, 2025

08:30–10:30

E1	E2	E3	E4	E5	E6
Ehud Cohen	Oren Shriki	Dori Derdikman, Yaniv Ziv	Gadi Gilam, Alexander Binshok	Hanna Keren	Marc Deffains
Cellular proteostasis mechanisms in health and disease	Artificial neural networks as models of biological sensory processing	Learning and Memory: From mice to humans	Modulating pain from the terminal to the brain – Basic and translational insights into mechanisms of pathological pain	Virtual environments for the study of human behavior and perception	Rethink about the role of the external globus pallidus in basal ganglia functions
Session Speakers – Avraham Ashkenazi, Simone Engelender, Adrian Israelson, Ehud Cohen, Ronit Ilouz	Session Speakers – Oren Shriki, Tal Golan, Galit Yovel, Omri Barak, Jonathan Kadmon	Session Speakers – Itzhak Fried, Dori Derdikman, Yaniv Ziv, Ayal Lavi	Session Speakers – Avraham Yaron, Rachely Butterman, Irit Weissman-Fogel, Gadi Gilam	Session Speakers – Tom Schonberg, Elana Zion-Golumbic, Roy Salomon, Hanna Keren, Adi Lustig	Session Speakers – Thomas Boraud, Hagai Bergman, Shiran Katabi, Dana Cohen
Avraham Ashkenazi Regulators of α -synuclein secretion and spread in Parkinson's disease	Oren Shriki Sensory recurrent networks: optimal information representation, hallucinations, and synaesthesia	Itzhak Fried	Avraham Yaron The kinesin family member 2a (kif2a) gates nociception	Tom Schonberg XR as a tool to densely study human behavior	Thomas Boraud Contribution of the non-human primate external globus pallidus in decision-making
Simone Engelender A novel decoy peptide strategy to prevent α -synuclein proteotoxicity in Parkinson's disease and other α -synucleinopathies	Tal Golan Disentangling representational geometries in neural network models of human perception	Eran Stark Short term memory in freely moving mice	Rachely Butterman Inflammation induced plasticity in pain-related spinal cord networks underlying pathological pain	Elana Zion-Golumbic The Neural Underpinnings of Attention and Distraction in (virtual) Realistic Environments	Student of Hagai Bergman Discharge features of the non-human primate external globus pallidus during sleep
Adrian Israelson Targeting low levels of MIF expression as a potential therapeutic strategy for ALS	Galit Yovel What can deep learning tell us about human face recognition?	Dori Derdikman Active experience, not time, determines within day representational drift in dorsal CA1	Irit Weissman-Fogel Reinforcement of pain modulation- a mechanism based teratemtn for pain relief in chronic pain	Roy Salomon Keep it Real- Using virtual reality to understand real human behaviors	Shiran Katabi Dichotomous Activity and Function of the LFD and HFD neurons in the NHP GPe
Ehud Cohen	Omri Barak Aligned and oblique dynamics in recurrent neural networks	Yaniv Ziv	Gadi Gilam The Neural Bases of Emotion Regulation of Pain in Chronic Pain	Hanna Keren Studying mood dynamics in a rich virtual context	Dana Cohen Multidimensional encoding in the rodent external globus pallidus
Ronit Ilouz Mutation in Protein Kinase A (PRKAR1B) gene drives pathological mechanisms of Neurodegeneration	Jonathan Kadmon Rethinking backpropagation: training large neural networks with low-dimensional error signals	Ayal Lavi Causal role of insular cortex neuronal activity manifolds in appetitive and aversive learning		Adi Lustig Heart rate related measures response to visual-physical incongruent walking conditions	

10:30–11:00 *Coffee Brake*

11:00–13:00

F1	F2	F3	F4	F5	F6
Lior Mayo	Abed Mansour	Yoav Livneh	Gilad Silberberg, Ilan Lampl	Gaddi Blumrosen	Michal Rivlin
Here and Back Again, A Neuroimmunology's Tale	Stem-cells based technologies to study brain disorders	Brain-body interactions in the insular cortex	Structure and function of interhemispheric communication	Monitoring and Diagnostics of neurological disease and disorders at home environment settings	Coding principles in sensory and motor systems: breaking the rules
Session Speakers – Lior Mayo, Michal Schwartz, Eran Blacher, Alon Monsenero, Itay Zalayot	Session Speakers – Shani Stern, Zeev Melamed, Gad Vatine, Eran Hornstein, Mahmood Ali, Ahd hamdan	Session Speakers – Sarah Stern, Yael Prilutski, Yoav Livneh, Stav Shtiglitz, Kolatt Chandran Sailendrakumar, Kobi Rosenblum, Asya Rolls	Session Speakers – Katayun Cohen-Kashi, Noa Rivlin, Yael Oran, Yaniv Assaf, Netanel Ofer	Session Speakers – Hadas Lewy, Jason Friedman, Inbal Maidan, Gaddi Blumrosen, Hila Gvirtz, Joachim Beharn	Session Speakers – Shiko Parnas, Rony Azouz, Mati Joshua, Inbal Shainer, Elyashiv Zangen
Lior Mayo	Shani Stern Seeking Convergence and Divergence between Autism and Schizophrenia using genomic tools and iPSC patient derived neurons	Sarah Stern Insular cortex circuits mediating dlexible feeding behaviors	Katayun Cohen-Kashi Behavioral states control binocular vision through input-specific mechanisms	Hadas Lewy Research and Development of digital parameters for functional and cognitive assessment at home	Shiko Parnas Intraglomerular excitation along with interglomerular inhibition are required for odor separation
Michal Schwartz Why does the immune system fall short in dementia and could be restored by immunotherapy?	Zeev Melamed Rescue of impaired axonal regeneration in ipsc-derived motor neurons affected by tdp-43 pathology	Yael Prilutski Interoceptive predictions during hunger and thirst in the insular cortex	Noa Rivlin Behavioral Control by Claustro-Cortical Circuits	Jason Friedman Evaluating changes in dexterity in people with Parkinson's disease at home using an electric piano	Rony Azouz Reliability and Stability of Tactile Perception in Rodents
Eran Blacher Mapping the immune response in the aging gut at the setting of stroke	Gad Vatine Modeling Neurological Disorders at the Blood Brain barrier (BBB)	Yoav Livneh Brain-body interactions: Sensations and predictions in the insular cortex	Yael Oran Reduction of corpus callosum activity during whisking leads to interhemispheric decorrelation	Inbal Maidan Parkinson disease severity evaluation from home based real-life facial video	Mati Joshua High-Dimensional Encoding of Movement by Single Neurons in Basal Ganglia Output
Alon Monsenero A neuro-endocrine-immune perspective to age-related neurodegenerative disorders	Eran Hornstein AI-driven deep organellar phenotyping of human iPSC-derived neurons	Stav Shtiglitz Cortical interoceptive predictions for neural control of nutritional choice	Yaniv Assaf The evolution of interhemispheric connectivity	Gaddi Blumrosen Behavioral Based Neurological condition assessment: roadmap, and feasibility with ADHD diagnosis from real-life video	Inbal Shainer Positional information drives distinct traits in transcriptomically identified neuronal types
	Mahmood Ali Neural precursor cells from HIKESHI-related Hypo-myelinating Leukodystrophy (HHL) patients have impaired response to heat shock-induced stress	Kolatt Chandran Sailendrakumar Representation of Taste Valence Encoding in Anterior Insula (aIC) Projection Neurons	Netanel Ofer Branch-specific spike failures at distal axons in mouse cortex in vivo	Hila Gvirtz Automatic Alexithymia recognition from remote interviews with LLM models	Elyashiv Zangen Light-Responsive Neurons in the Medial Prefrontal Cortex Encode Light Intensity

11:00–13:00

F1

Itay Zalayat

Dissecting the effects of distinct VTA projections on peripheral immunity

F2

Ahd hamdan

Immunocompetent Human Midbrain Organoids to Study Neuroinflammation in Parkinson's Disease

F3

Kobi Rosenblum

Intra-insula Circuit Mediates the Association between External and Internal Sensory Information

Asya Rolls

Immunoception: immune representation in the brain

F4

F5

Joachim Behar

Sleep physiological biomarkers derived from continuous seamless monitoring sleep stages abnormalities at home

F6

13:00–14:00 *Lunch*

14:00–15:00 **Announcement of Prizes: Best mentor Prize, Poster Competition Prizes**

END OF ISFN 2025